EM 404 (s) Special Topics
Credit arranged

EM 502 (s) Directed Study
Credit arranged

EM 504 (s) Special Topics
Credit arranged)

EM 510 Engineering Management Fundamentals
3 credits
Fundamental principles of engineering management addressing
management theory applied to the engineering environment;
management processes and techniques; attitudes that facilitate
the leadership role of the engineering manager in an engineering
organization.
Prereq: Instructor permission.

EM 550 Process Improvement Methods
3 credits
This course will examine a framework for delivering dramatic and
sustained continuous improvement results through the integration of
improvement methodologies such as Lean Six Sigma and Design for Lean
Six Sigma (DFLSS).

EM 560 Project Risk Management
3 credits
Application of project risk assessment tools and techniques that help
increase the probability of project success. Discover different approaches
used by commercial and federal agencies to identify, assess, and quantify
risks and their impacts on projects.
Prereq: Instructor Permission

EM 570 Global Product Development
3 credits
Discussion of topics related to enabling effective global product
development spanning the entire product development cycle from
strategy development, through project execution, and ultimately post
release product support. Rather than presenting a fixed methodology,
this course will provide a framework for global development that can be
adapted to specific environments.

EM 580 Technical Project Management
3 credits
Traditional project management approaches are typically structured
around the five PMBOK (Project Management Book of Knowledge)
process groups. This course will introduce the PMBOK process groups
but then discuss five different project management life cycle (PMLC)
models to manage a project. The topics discussed are appropriate for
new project managers but also for experienced project managers who are
looking to increase their awareness and improve their skills in differing
PMLC models.

EM 582 Advanced Topics in Project Management
3 credits
Discussion and application of advanced project management topics
beyond those prescribed by traditional project management approaches.
Example topics include project portfolio management, multi-project
management, use of Theory of Constraints (TOC) and Critical Chain
approaches to drive improved results, and application of Agile practices.
These approaches should be applicable to a wide variety of industries
and functions.
Prereq: EM 580 or Instructor Permission

EM 596 Capstone Integration
1 credit
Capstone integration of degree material in Engineering Management and
comprehensive final exam.
Prereq: Permission

EM 599 (s) Non-thesis Master’s Research
Credit arranged
Research not directly related to a thesis or dissertation.
Prereq: Permission